

REMARKS

Claims 1-6, 8-28 and 30-38 are pending in the present application. By this Response, claims 1, 10, 23, 32, 37 and 38 are amended and claims 7 and 29 are canceled. Claims 1, 10, 23, 32, 37 and 38 are amended to incorporate subject matter similar to canceled claims 7 and 29. Reconsideration of the claims in view of the above amendments and the following remarks is respectfully requested.

I. Allowable Subject Matter

Applicants thank Examiner Suryawanshi for indicating the subject matter of claims 7 and 29 allowable. By this Response, claims 1, 10, 23, 32, 37 and 38 are rewritten to incorporate the allowable subject matter of claims 7 and 29. Accordingly, Applicants respectfully submit that the subject application is now in condition for allowance.

II. 35 U.S.C. § 103, Alleged Obviousness, Claims 1-38

The Office Action rejects claims 1-38 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Stickley Software, Inc (Subject: Re: Boot Flash Advice Please; Newsgroups: comp.arch.embedded; date: 1/29/1997; Message 7 in thread; herein as Stickley) in view of Huh et al. (U.S. Patent No. 6,584,559 B1). This rejection is respectfully traversed.

As to claim 1, 10, 15, 23, 32, 37 and 38, the Office Action states:

As per claims 1, 10, 15, 23, 32, 37 and 38, Stickley teaches the claimed invention comprising:

loading a current boot code from a non-volatile memory [load the boot code from the flash memory into the RAM];

initiating a boot sequence using the current boot code [execute the boot code from the RAM];

updating the current boot code in the non-volatile memory prior to loading the operating system for the data processing system if the updated boot code is present [overwrite the boot section of the non-boot portioned flash memory].

In summary, Stickley teaches the modification of the information [current boot code] stored in the flash memory and stores the updated version of the information [modified boot code] in the flash memory thereafter. Stickley does not teach the detail in obtaining the updated version of the information stored in the flash memory. Specifically, Stickley does not teach searching of a storage device for the updated version of the information stored in the flash memory.

Huh et al teach the detail to update the information stored in the flash memory. Specifically, Huh et al search the storage device [disk'] for the updated version of the information [firmware] stored in the flash memory [the system determines whether any new firmware is present to upgrade or replace the old firmware, col. 4, lines 29 – 30]. If the updated version is present, Huh et al update the current version accordingly [col. 6, lines 15 – 16].

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Stickley and Huh et al because they both teach how to update information stored in the flash memory. Stickley does not detail how to obtain the update information. Huh et al teach detail to obtain the updated version of information stored in the flash memory thereby allowing Stickley to update the boot code stored in the flash memory.

Office Action dated August 12, 2004, pages 2-4.

As to claims 1, 10, 23, 32, 37 and 38, Applicants respectfully submit that these claims are rewritten to include the allowable subject matter indicated in the Office Action on page 7, and, thus, are in condition for allowance.

Claim 15 reads as follows:

15. A data processing system comprising:
 - a bus;
 - a first storage device connected to the bus, wherein the first storage device includes current boot code instructions;
 - a second storage device connected to the bus, wherein an operating system is located on the second storage device; and
 - a processor unit connected to the bus, wherein the processor unit executes the current boot code instructions to determine whether updated boot code instructions are present in the second storage device, updates the current boot code instructions using the updated boot code instructions to form an updated set of boot code instructions if the updated boot code instructions are present on the second storage device, reinitializes the data processing system using the updated set of boot code instructions if the current boot code instructions are updated, and loads the operating system using the updated set of boot code instructions. (emphasis added)

Applicants respectfully submit that the emphasized portion of independent claim 15 is similar to the subject matter indicated allowable by the Examiner. That is, claim 15 recites "reinitializes the data processing system using the updated set of boot code instructions if the current boot code instructions are updated, and loads the operating system using the updated set of boot code instructions." The subject matter indicated allowable by the Examiner recites "restarting the data processing system using the new current boot code, and loading the operating system using the new current boot code."

Therefore, Applicants respectfully submit that claim 15 should be indicated allowable for the same reasons the Examiner indicated the subject matter of claims 7 and 29 allowable. At least by virtue of their dependency on independent claims 1, 10, 15, 23 and 32, the specific features of dependent claims 2-6, 8, 9, 11-14, 16-22, 24-28, 30, 31 and 33-36 are also allowable. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 1-6, 8-28 and 30-38 under 35 U.S.C. § 103.

III. Conclusion

It is respectfully urged that the subject application is patentable over the prior art of record and is now in condition for allowance. The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

Respectfully submitted,

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